
ОРГАНІЗАЦІЙНО - ЕКОНОМІЧНІ ПРОБЛЕМИ ІННОВАЦІЙНОЇ ДІЯЛЬНОСТІ

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INNOVATIVE FRAMEWORK FOR THE DEVELOPMENT OF THE ELECTRICAL INDUSTRY OF UKRAINE

Ukrainian electrotechnical industry – intellectually stimulating industry, enterprises which produce very different products intended for the production, conversion, transmission and consumption of electricity. Electrical facilities produce power generators, electric generators and motors of different capacities, converters and transformers, high-voltage and low-voltage equipment, electric welding, electrical and electrothermal equipment, cable products, lamps and lighting fittings, electrical insulating materials, electrical appliances, galvanic cells and batteries, electric, electric, and other products. This production focuses mainly on skilled labor. Therefore, its main centers (Zaporozhye, Kharkov, Kiev, Odessa, Donetsk, Berdyansk) are located in the East and centre of the country. The products of the electrical industry is the basis for electrification of all spheres of the national economy of our country, without it is impossible automation and mechanization of production processes. It is the Foundation for the development and accelerate the pace of scientific and technological progress. Therefore, the research and analysis of the development of the electrical industry on the basis of the intellectual component, the development and use of intellectual property objects (IPO), identification of existing problems and the development of proposals for their elimination are

extremely relevant.

Our studies indicate that the electrical industry of Ukraine is closely connected with the innovative development of industry in General and engineering in particular. It is meaningful are data that in 2014 sales of products outside Ukraine was carried out by 295 companies, which accounted for 29.2% of the total volume of sales of innovative products. Almost every fourth company to sell their products, which was new to the market. The volume of such products amounted to 7.1 bln., 38.6% of which 85 companies exported. A significant number of businesses (787) sold products that were new for the company. Its volume amounted to 18.6 billion UAH., a quarter (25.6 per cent) 238 enterprises have implemented outside of Ukraine [1].

To implement innovations 154 of the enterprise acquired 543 new technologies, of which 117 outside Ukraine. Of the total number of technologies 297 purchased with the equipment, of which 85 outside Ukraine; 120 – as a result of research and development (10); 50 on the contracts for the acquisition of rights to patents, licenses for the use of inventions, industrial designs, utility models (20); 23 – under contracts for the acquisition of technology and know-how (1); 5 – together with targeted recruitment of qualified professionals[1].

As a result of innovative activity of industrial enterprises of Ukraine has created new technologies, of which 28 were transferred to other companies, including 8 – outside Ukraine.

During 2012-2014. innovative activity in the industry engaged 2259 businesses, or 22.6% of patients. Machinery and equipment acquired 1758 enterprises, 556 companies engaged in the education and training of personnel for the development and implementation of new or significantly improved products and processes; 303 enterprise funds spent on internal research, 174 – R & d performed by other enterprises (external); 164 businesses acquired other external knowledge; 142 – was engaged in activities concerning market introduction of innovations; 275 companies engaged in other activities to implement new or significantly improved products and processes [1].

The innovation in this period was engaged in 1595 enterprises (15,9% among the surveyed industrial), including innovative products – 1054 enterprises, of which 257 – new to the market and 923 – new only for the enterprise; innovative processes implemented 1127 enterprises, of which 926 – new or improved methods of processing or production, 233 – new or improved logistics, delivery or distribution of products and 349 – new or improved activities in support of processes, in particular of the system of material maintenance, operations, purchasing, accounting and payments; to meet the needs of consumers and increase sale 289 companies have implemented marketing innovations; 232 enterprises increased their efficiency through the introduction of organizational innovations [1].

In table.1 shows the dynamics of the volume of sales in the engineering and it sectors over the period from 2001 to 2014.

Table 1

Place the electrical industry in the volume of sales engineering for years 2001-2014 [2-4].

Year	Engineering as a whole	Basic branches of engineering		
		The production of machinery and equipment	The production of electrical products	Production of vehicles
2001	21523,1	10222,6	5647,9	5652,6
2002	24492,2	10292,2	6189,7	8010,3
2003	35133,1	13070,7	8352,2	13710,2
2004	53569,3	16988,5	16437,2	20143,6
2005	59668,1	20762,3	13530,5	25375,3
2006	68730,6	22423,2	15510,3	30797,1
2007	98339,9	30100,4	21216,5	47023,0
2008	121780,4	37271,5	25580,5	58928,4
2009	72240,7	28528,4	20242,8	25469,5
2010	99270,5	31222,4	16193,4	44846,3
2011	133469,0	38474,2	17332,3	65915,2
2012	143533,1	38682,7	22800,3	74035,8
2013	117745,7	36130,3	22298,2	51679,9
2014	111342,2	35644,2	21987,3	54234,6

The data show that the electrical industry is organically linked with the main branches of engineering and the dynamics of its indicators practically repeats the dynamics of indicators of engineering in General, production of vehicles or machinery and equipment. Electrical industry of Ukraine is one of the most important branches of national industry. Therefore, the problems faced by the Ukrainian economy in recent years has not passed and the electrical industry. The lack of effective state regulation and support from the state has exacerbated the situation. Financial difficulties, dependence on imported raw materials, low investment activity contributed to a sharp drop in production volumes in the industry in 2009 and 2013-2014.

Analysis of the data table.1 shows that since 2001 in the electrical industry there is a steady tendency of growth of volumes of output. The greatest volume of sales of electrical products account for the period 2004-2008 Maximum rate of manufactured products – 25580,5 thousand UAH. is 2008, which was the last before the global financial crisis. The crisis has left its mark on electrical industry sales volumes in 2009 decreased sharply.

The studies show that the development of competition in the domestic market of electrical year decreased by more than 20 percent (up to 20242,8 thousand UAH). The complex political situation in the country affects the reduction of volumes of

output in recent times, hinders the development of the intellectual component, the transfer of objects of production is constrained by narrow specialization of enterprises. Every electrical company focuses on production of certain types of products (e.g. motors, low-voltage equipment, transformers, cables, high voltage equipment, etc.), since the simultaneous production of different products in one company requires substantial funds, which the domestic producers don't have. Many companies are now working directly on a particular order (single or small series production), refusing to serial production [5-8].

It makes no sense to increase the volume of production, which does not find a matching demand in the domestic market from the Ukrainian consumer. At the same time, to break into foreign markets to domestic producers is difficult, given the tough competition for them. For the sale of their products on the foreign market, a number of Ukrainian enterprises strive to acquire the certificate of the international quality standard ISO 9001 (its cost is 50-70 thousand USD), while pre-securing long-term sales channels [8].

Thus, we can conclude that to date the electrical industry of Ukraine is in a very difficult position, so you need to take urgent measures to repair it. In each region of Ukraine has a highly qualified staff that can ensure the competitiveness of domestic products (motors, transformers, cables, etc.). You should upgrade the electrical industry, to reduce the tax burden, simplify customs procedures for enterprises that use in the production of raw materials of high quality.

References: 1. Інноваційна діяльність промислових підприємств у 2014 році [Електронний ресурс].- Режим доступу: <http://www.ukrstat.gov.ua/> 2. Електротехнічна промисловість [Електронний ресурс].- Режим доступу: http://leksika.com.ua/12960901/ure/elektrotehnichna_promislovist 3. Статистичний щорічник України за 2014 рік / Державний комітет статистики України. – К.: Консультант, 2015. – 576 с. 4. Україна у цифрах у 2014 році. Статистичний збірник//За редакцією Осауленка О.Г.- К.: Державний комітет статистики України, 2015.- 252 с. 5. Перерва, П.Г. Науково-інноваційний потенціал України та сучасні проблеми його використання / П.Г.Перерва, О.В.Жегус. — [Електронний ресурс]. — Режим доступу: http://archive.nbuv.gov.ua/portal/Natural/vcpi/TPtEV/2011_26/statiya/Pererva.pdf 6. Перерва, П. Г. Організація та управління інноваційною діяльністю: підруч. / П. Г. Перерва, С. А. Мехович, М. І. Погорелов. - Харків: НТУ "ХПІ", 2008. – 1025 с. 7. Перерва, П. Г. Економіка та організація інноваційної діяльності : підруч. / П.Г.Перерва; за ред. П.Г.Перерви, С.А.Меховича, М.І.Погорелова. – Харків : НТУ «ХПІ», 2008. – 1080 с. 8. Pererva, P.G. Technology transfer / P.G.Pererva, G.Kocziszky, D.Szakaly, M.Somosi Veres - Kharkiv-Miskolc : NTU “KhPI”, 2012. – 668p.